



Designation: D6189 – 97 (Reapproved 2022)

Standard Practice for Evaluating the Efficiency of Chemical Removers for Organic Coatings¹

This standard is issued under the fixed designation D6189; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 The practice evaluates the effectiveness of coatings removers used on clear or pigmented coatings as applied to wood and metal.

1.2 The values stated in SI units are to be regarded as the standard. The values given in parentheses are for information only.

1.3 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety, health, and environmental practices and determine the applicability of regulatory limitations prior to use.*

1.4 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Referenced Documents

2.1 *ASTM Standards:*²

D609 Practice for Preparation of Cold-Rolled Steel Panels for Testing Paint, Varnish, Conversion Coatings, and Related Coating Products

D823 Practices for Producing Films of Uniform Thickness of Paint, Coatings and Related Products on Test Panels

D3924 Specification for Standard Environment for Conditioning and Testing Paint, Varnish, Lacquer, and Related Materials

E145 Specification for Gravity-Convection and Forced-Ventilation Ovens

¹ This practice is under the jurisdiction of ASTM Committee D01 on Paint and Related Coatings, Materials, and Applications and is the direct responsibility of Subcommittee D01.42 on Architectural Coatings.

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² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

3. Terminology

3.1 *Definitions of Terms Specific to This Standard:*

3.1.1 *coatings remover, n*—a product that is formulated for the removal of paint, varnish, lacquer, shellac, or polyurethane top coats, or related coatings, or both.

4. Summary of Practice

4.1 Test panels are coated and force dried. The coatings remover is applied with a brush and the loosened coating is lifted with a plastic scraper after a specified time. Coatings removal efficiency is determined and recorded using a rating scheme of 5 to 0.

5. Significance and Use

5.1 Old coatings, such as paint or related coatings, may have to be removed from a surface before successful recoating can occur. This practice can be used to test the coatings removal efficiency of products designed for such use.

6. Apparatus

6.1 *Forced Draft Oven, Type IB*, in accordance with Specification **E145**.

6.2 *Paint Brush*, containing nylon/polyester bristles.

6.3 *Plastic Paint Scraper*.

6.4 *Very Fine Garnet Abrasive-Type Sandpaper*, 240 to 220 grade.

6.5 *Stopwatch*.

7. Testing Materials

7.1 *Finished*—is recommended to test coatings removers on a variety of finishes such as latex enamel, alkyd enamel, polyurethane, varnish, shellac, and nitrocellulose lacquer, or as agreed upon between the purchaser and the seller.

7.2 Wood test panels of solid wood or wood laminate such as birch plywood, fir, pine, oak, or walnut. Smooth sawn panels of dimensions not less than 300 mm by 300 mm (12 in. by 12 in.) and 8 mm ($\frac{5}{16}$ in.) thick.

7.3 Steel test panels with dimensions of 150 mm by 300 mm (6 in. by 12 in.) and 0.8 mm (0.032 in.) thick.